

Title (en)  
METHOD OF MANUFACTURING CALCIUM SULFONATE GREASES USING DELAYED ADDITION OF NON-AQUEOUS CONVERTING AGENTS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON CALCIUMSULFONATSCHMIERFETT MIT VERZÖGERTER ZUGABE VON NICHTWÄSSRIGEN UMWANDLUNGSMITTELN

Title (fr)  
PROCÉDÉ DE FABRICATION DE GRAISSES DE SULFONATE DE CALCIUM PAR ADDITION DIFFÉRÉE D'AGENTS DE CONVERSION NON AQUEUX

Publication  
**EP 3400279 A1 20181114 (EN)**

Application  
**EP 16884166 A 20161214**

Priority  
• US 201614990473 A 20160107  
• US 2016066547 W 20161214

Abstract (en)  
[origin: WO2017119999A1] A method of manufacturing an overbased calcium sulfonate grease comprising a reduced amount of overbased calcium sulfonate, water and at least one non-aqueous converting agent, where at least a portion of the non-aqueous converting agent is added after one or more delay periods relative to the addition of the water. A delay period may involve the period of time it takes to adjust the temperature of the mixture, a period of time during which the mixture is held at a temperature or within a range of temperatures, and multiples and any combination thereof. These calcium sulfonate greases have improved thickener yield and high dropping points compared to greases of substantially similar composition made without a delay between the additions of water and a non-aqueous converting agent, particularly when a poor quality overbased calcium sulfonate is used.

IPC 8 full level  
**C10M 159/12** (2006.01); **C10M 159/18** (2006.01); **C10M 159/20** (2006.01); **C10M 169/02** (2006.01); **C10M 169/04** (2006.01);  
**C10M 177/00** (2006.01)

CPC (source: EP)  
**C10M 115/10** (2013.01); **C10M 121/04** (2013.01); **C10M 169/06** (2013.01); **C10M 177/00** (2013.01); **C10M 2203/1025** (2013.01);  
**C10M 2207/022** (2013.01); **C10M 2207/046** (2013.01); **C10M 2207/1245** (2013.01); **C10M 2209/103** (2013.01); **C10M 2219/0466** (2013.01);  
**C10N 2010/04** (2013.01); **C10N 2050/10** (2013.01)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2017119999 A1 20170713**; CN 108463542 A 20180828; CN 108463542 B 20200317; EP 3400279 A1 20181114; EP 3400279 A4 20181114

DOCDB simple family (application)  
**US 2016066547 W 20161214**; CN 201680078416 A 20161214; EP 16884166 A 20161214